

Exhibit A

Answer each question on the verdict form from the facts as you find them. Do not decide who you think should win and then answer the questions accordingly. Your answers and your verdict must be unanimous.

In determining whether any fact has been proved in this case, you may, unless otherwise instructed, consider the testimony of all witnesses, regardless of who may have called them, and all exhibits received in evidence, regardless of who may have produced them.

1.1 CONSIDERING WITNESS TESTIMONY

By the Court allowing testimony or other evidence to be introduced over the objection of an attorney, the Court did not indicate any opinion as to the weight or effect of such evidence. You are the sole judges of the credibility of all witnesses and the weight and effect of all evidence.

When the Court sustained an objection to a question addressed to a witness, you must disregard the question entirely, and may draw no inference from the wording of it or speculate as to what the witness would have testified to, if he or she had been permitted to answer the question.

At times during the trial it was necessary for the Court to talk with the lawyers here at the bench out of your hearing, or by calling a recess. We met because often during a trial something comes up that does not involve the jury. You should not speculate on what was discussed during such times.

In determining the weight to give to the testimony of a witness, you should ask yourself whether there was evidence tending to prove that the witness testified falsely concerning some important fact, or whether there was evidence that at some other time the witness said or did something, or failed to say or do something, that was different from the testimony the witness

gave before you during the trial.

You should keep in mind, of course, that a simple mistake by a witness does not necessarily mean that the witness was not telling the truth as he or she remembers it, because people may forget some things or remember other things inaccurately. So, if a witness has made a misstatement, you need to consider whether that misstatement was an intentional falsehood or simply an innocent lapse of memory; and the significance of that may depend on whether it has to do with an important fact or with only an unimportant detail.

1.2 HOW TO EXAMINE THE EVIDENCE

Certain testimony in this case has been presented to you through a deposition. A deposition is the sworn, recorded answers to questions asked of a witness in advance of the trial. Under some circumstances, if a witness cannot be present to testify from the witness stand, the witness testimony may be presented, under oath, in the form of a deposition. Some time before this trial, attorneys representing the parties in this case questioned this witness under oath. This deposition testimony is entitled to the same consideration and is to be judged by you as to credibility and weight as if the witness had been present and had testified from the witness stand in court.

While you should consider only the evidence in this case, you are permitted to draw such reasonable inferences from the testimony and exhibits as you feel are justified in the light of common experience. In other words, you may make deductions and reach conclusions that reason and common sense lead you to draw from the facts that have been established by the testimony and evidence in the case.

The testimony of a single witness may be sufficient to prove any fact, even if a greater number of witnesses may have testified to the contrary, if after considering all the other evidence

you believe that single witness.

There are two types of evidence that you may consider in properly finding the truth as to the facts in the case. One is direct evidence — such as testimony of an eyewitness. The other is indirect or circumstantial evidence — the proof of a chain of circumstances that indicates the existence or nonexistence of certain other facts. As a general rule, the law makes no distinction between direct and circumstantial evidence, but simply requires that you find the facts from a preponderance of all the evidence, both direct and circumstantial.

1.3 DEMONSTRATIVE EXHIBITS

Certain exhibits shown to you are illustrations. We call these types of exhibits “demonstrative exhibits.” Demonstrative exhibits are a party’s description, picture, or model to describe something involved in this trial. If your recollection of the evidence differs from the exhibit, rely on your recollection.

1.4 EXPERT WITNESSES

When knowledge of a technical subject matter may be helpful to the jury, a person who has special training or experience in that technical field—called an expert witness—is permitted to state his or her opinion on those technical matters. However, you are not required to accept that opinion. As with any other witness, it is up to you to decide whether to rely upon it.

In deciding whether to accept or rely upon the opinion of an expert witness, you may consider any bias of the witness, including any bias you may infer from evidence that the expert witness has been or will be paid for reviewing the case and testifying, or from evidence that he or she testifies regularly as an expert witness and that income from such testimony represents a significant portion of the expert’s income.

2. SUMMARY OF CONTENTIONS

I will first give you a summary of each side's contentions in this case. I will then tell you what each side must prove to win on these issues.

2.1 CONTENTIONS OF THE PARTIES

Fractus contends that Samsung makes, uses, offers to sell, sells or imports products – specifically, antennas used in cellular phones – that infringe a number of the patent claims in the four patents that are at issue in this case. Samsung asserts that all of the asserted patent claims are invalid on one or more grounds. The patent claims at issue in this trial are as follows: claims 26 and 36 of U.S. Patent No. 7,015,868 (the '868 Patent), claims 7 and 12 of U.S. Patent No. 7,123,208 (“the '208 Patent”), claims 14 and 30 of U.S. Patent No. 7,397,431 (“the '431 Patent”), claim 6 of U.S. Patent No. 7,394,432 (“the '432 Patent”), and claim 40 of U.S. Patent No. 7,411,556 (“the '556 Patent”) (collectively, the “Asserted Claims”).

Samsung contends that the Asserted Claims are invalid because (1) the asserted claims are anticipated by the prior art (2) the asserted claims are rendered obvious by the prior art; (3) the asserted claims do not satisfy the written description requirement; and (4) the asserted claims, as written, do not satisfy the enablement requirement.. Even though the PTO examiner has allowed the claims of the patents that are in issue, you, the jury, must decide whether the claims of those patents are invalid.

2.3 ISSUES TO BE DECIDED

Your job is to decide whether the Asserted Claims have been infringed and whether any of the Asserted Claims are invalid.

If you decide that any claim of the patent has been infringed and is not invalid, you will then need to decide the amount of money damages to be awarded to Fractus as compensation for

the infringement.

2.4 BURDENS OF PROOF

As I told you at the beginning of this trial, in any legal action, facts must be proved by a required amount of evidence, known as the “burden of proof.” The burden of proof in this case is on Fractus for some issues and on Samsung for others.

Fractus has the burden of proving infringement and damages. Infringement determinations are made on a claim-by-claim basis. Fractus must prove infringement and damages by a preponderance of the evidence.

Samsung has the burden of proving invalidity. Validity determinations are made on a claim-by-claim basis. Samsung must prove invalidity by a preponderance of the evidence.

When a party has the burden of proof on any claim or defense by a preponderance of the evidence, that means the evidence must persuade you that that claim or defense is more probable than not.

In determining whether any fact has been proved, you should, unless otherwise instructed, consider all of the evidence, including the stipulations, the testimony of all witnesses regardless of who may have called them, and all exhibits received in evidence regardless of who may have produced them.

3. CLAIMS OF THE PATENT-IN-SUIT

As I told you at the beginning of the trial, the claims of a patent are the numbered sentences at the end of the patent. The claims describe the invention made by the inventor and describe what the patent owner owns and what the patent owner may prevent others from doing. Claims may describe products or systems, such as machines, or processes or methods for making

or using a product or system.

Claims are usually divided into parts or steps, called “requirements” or “limitations.” For example, a claim that covers the invention of a table may recite the tabletop, four legs and the glue that secures the legs on the tabletop. The tabletop, legs and glue are each a separate limitation (requirement) of the claim.

3.1 CONSTRUCTION OF THE CLAIMS

In deciding whether or not the accused technology infringes a patent, the first step is to understand the meaning of the words used in the patent claims. The meaning of the words in the patent claim is the same for both the infringement and the validity determinations.

It is my job as Judge to determine what the patent claims mean and to instruct you about that meaning. You must accept the meanings I give you and use those meanings when you decide whether or not the patent claims are infringed, and whether or not they are invalid.

Before I instruct you about the meaning of the words of the claims, I will explain to you the different types of claims that are at issue in this case.

3.2 OPEN-ENDED OR “COMPRISING” CLAIMS

The beginning, or preamble, of each claim uses the word “comprising.” “Comprising” means “including” or “containing, but not limited to.” That is, if you decide that Samsung’s product includes all the requirements in the claims, the claim is infringed. This is true even if the accused product includes components in addition to those requirements.

For example, a claim to a table comprising a tabletop, legs, and glue would be infringed by a table that includes a tabletop, legs, and glue, even if the table also includes wheels on the table’s legs.

3.3 INDEPENDENT AND DEPENDENT CLAIMS

Patent claims may exist in two forms, referred to as independent claims and dependent claims. An independent claim does not refer to any other claim of the patent. It is not necessary to look at any other claim to determine what an independent claim covers.

A dependent claim refers to at least one other claim in the patent. A dependent claim includes each of the limitations of the other claim to which it refers, as well as the additional limitations recited in the dependent claim itself. In this way, the claim “depends” on another claim.

When analyzing the invalidity and alleged infringement of any dependent claim asserted by Fractus, you must consider all limitations of both the dependent claim and the independent claim from which it depends. To determine what a dependent claim covers, it is necessary to look at both the dependent claim and any other claim(s) to which it refers. A system or method that meets all of the requirements of both the dependent claim and the claim(s) to which it refers is covered by that dependent claim.

In deciding whether or not the accused technology does or does not infringe a patent claim, or whether the asserted prior art does or does not invalidate a patent claim, the first step is to understand the meaning of the words used in the patent claims. The meaning of the words in the patent claims is the same for both the infringement and the validity determinations.

As I stated earlier, it is my job as Judge to determine what the patent claims mean and to instruct you about that meaning. In accordance with that duty, I have interpreted the meaning of some of the language in the patent claims involved in this case. My interpretation of those claims appears in Appendix A to this Charge. You must accept the interpretations contained in Appendix A as correct. The claim language I have not interpreted for you in Appendix A is to be given its ordinary and accustomed meaning as understood by one of ordinary skill in the field of

technology.

3.5 GLOSSARY OF PATENT TERMS

A glossary of patent terms is also contained in Appendix A to this Charge.

4. INFRINGEMENT

4.1 DETERMINING INFRINGEMENT

Any person or business entity that, without the patent owner's permission, makes, uses, sells, or offers to sell a device that is covered by at least one claim of a patent, before the patent expires, infringes the patent. In this case, Fractus asserts that Samsung has infringed claims 26 and 36 of U.S. Patent No. 7,015,868 (the '868 Patent), claims 7 and 12 of U.S. Patent No. 7,123,208 ("the '208 Patent"), claims 14 and 30 of U.S. Patent No. 7,397,431 ("the '431 Patent"), claim 6 of U.S. Patent No. 7,394,432 ("the '432 Patent"), an claim 40 of U.S. Patent No. 7,411,556 ("the '556 Patent") (collectively, the "Asserted Claims"). Fractus has the burden of proving infringement by a preponderance of the evidence. Only the claims of a patent can be infringed. You must consider each claim individually.

You must compare each of the asserted claims, as I have defined them, to each of Samsung's accused devices, and determine whether or not there is infringement. In order to prove infringement, Fractus must prove that Samsung's phones include each and every limitation of the claim.

4.2 DIRECT INFRINGEMENT – LITERAL INFRINGEMENT

You must decide whether Samsung has made, used, sold or offered for sale within the United States apparatuses or instrumentalities covered by one or more of the Asserted Claims. You must compare each claim to Samsung's accused instrumentalities to determine whether

every requirement of the claim is included in the accused instrumentality.

To prove literal infringement, Fractus must prove by a preponderance of the evidence that Samsung's accused instrumentality includes every requirement in a single Asserted Claim. If Samsung's product or instrumentality omits any requirement recited in an Asserted Claim, Samsung does not infringe that claim. In making your determination, you must consider each claim separately, and each accused instrumentality separately.

For literal infringement, Fractus is not required to prove that Samsung intended to infringe or knew of the '868 Patent, '208 Patent, '431 Patent, '432 Patent or '556 Patent.

4.3 DIRECT INFRINGEMENT – DOCTRINE OF EQUIVALENTS

Fractus alleges that Samsung infringed certain claims of the four patents under the “doctrine of equivalents.”

To prevail on its allegation of infringement, Fractus must prove that it is more probable than not that the accused product contains requirements identical or equivalent to each claimed requirement of the patented invention. You must proceed on a requirement-by-requirement basis. Fractus must establish that each requirement in the claim is present in the accused product, either literally or under the doctrine of equivalents.

A claim requirement is present in an accused product under the doctrine of equivalents if the difference between the claim requirement and a corresponding aspect of the accused product is insubstantial.

In making this determination, you may consider whether the corresponding aspect in the accused product performs substantially the same function in substantially the same way to achieve substantially the same result as the requirement in the claim. You may also consider whether people of ordinary skill in the art believed that the corresponding aspect of the accused

product and the requirement recited in the patent claim were interchangeable at the time of the alleged infringement. The proper time for evaluating equivalency—and thus knowledge of interchangeability between requirements—is the time of infringement, not the time the patent was issued. Under the doctrine of equivalents, those of ordinary skill in the art do not have to know of the equivalent when the patent application was filed or when the patent issued. Thus, the inventor need not have foreseen, and the patent need not describe, all potential equivalents to the invention covered by the claims. Also, changes in technique or improvements made possible by technology developed after the patent application is filed may still be equivalent for the purposes of the doctrine of equivalents.

4.4 WILLFULNESS

In this case, Fractus alleges that the Samsung willfully infringed the Asserted claims of the patents-in-suit. The issue of willful infringement relates to the amount of damages Fractus is entitled to recover in this lawsuit. If you decide that the Samsung willfully infringed the claims of Fractus's patent, then it is my job to decide whether or not to award increased damages to Fractus. You should not take this factor into account in assessing the damages, if any, to be awarded to Fractus.

To prove willful infringement, Fractus must persuade you that it is highly probable that, before May 9, 2009, Samsung acted with reckless disregard of the claims of Fractus' patents. To show "reckless disregard," Fractus must satisfy a two-part test: the first concerns Samsung's conduct, the second concerns Samsung's state of mind.

When considering Samsung's conduct, you must decide whether Fractus has proven it is highly probable that each Samsung's conduct was reckless; that is, that each Defendant proceeded with the allegedly infringing conduct with knowledge of the patent, and in the face of

an unjustifiably high risk that it was infringing the claims of a valid and enforceable patent. The state of mind of Samsung is not relevant to this part of the inquiry. Reasonable or credible defenses presented at trial, even if ultimately not successful, demonstrate a lack of recklessness.

If you conclude that Fractus has proven that Samsung's conduct was reckless, then you need to consider Samsung's state of mind. You must determine whether Fractus proved it is highly probable that the unjustifiably high risk of infringement was known or so obvious that it should have been known to each Defendant. In deciding whether Samsung satisfied the state-of-mind part of the test, you should consider all facts surrounding the alleged infringement.

5. INVALIDITY

5.1 INVALIDITY – GENERALLY

Patent invalidity is a defense to patent infringement. Even though the Patent Office examiner has allowed the claims of a patent, you have the ultimate responsibility for deciding whether the claims of the patent are valid.

The issuance of a patent by the Patent Office provides a presumption that the patent is valid. From the issuance of the patent, it is presumed that a claimed invention is “novel,” “useful,” “not obvious,” and satisfies the other legal requirements for a valid U. S. patent. Each claim of a patent is presumed valid independently of the validity of the other claims.

In making your determination as to whether a patent claim is valid or invalid, you must consider each patent and each of the claims of a patent separately and individually, as you did when you considered whether the claim was infringed or not. If a preponderance of the evidence demonstrates that a claim in a given patent fails to meet the requirements of the patent laws, then that patent is invalid. However, if you find that one or more claims of a patent fails to meet the

requirements of the patent laws, it does not necessarily mean that the remaining claims of that patent are also deficient or invalid.

The presumption of validity remains intact and the burden of proof remains on the party challenging validity, throughout this litigation. In other words, the burden of proof never shifts to the patent owner to prove that its patents are valid.

I will now instruct you on the invalidity issues you should consider.

5.2 ANTICIPATION – PUBLICLY USED OR KNOWN, OR PREVIOUSLY PUBLISHED

Samsung contends that the Asserted Claims are invalid because the claimed inventions are not new.

For a claim to be invalid because it is not new, all of its requirements must have existed in a single device or method that predates the claimed invention, or must have been described in a single previous publication or patent that predates the claimed invention.

In patent law, such previous device, publication or patent is called a “prior art reference.” If a patent claim is not new, we say it is “anticipated” by a prior art reference. Samsung must prove by a preponderance of the evidence that the claim was anticipated.

The disclosure in the prior art reference does not have to be in the same words as the claim, but all of the requirements of the claim must be there, either stated or necessarily implied, so that someone of ordinary skill in the relevant field looking at that one reference would be able to make and use at least one embodiment of the claimed invention.

Anticipation also occurs when the claimed invention inherently (necessarily) results from the practice of what is disclosed in the written reference, even if the inherent disclosure was unrecognized or unappreciated by one of ordinary skill in the field of the invention.

Here is a list of the ways that Samsung can show that a patent claim was not new:

- if the claimed invention was already publicly known or publicly used by others in the United States before the date of invention of the Asserted Claims.
- if the claimed invention was already patented or described in a printed publication anywhere in the world before the date of invention. To qualify as a prior art reference, a “printed publication” must be at least reasonably accessible to those interested in the field, even if it is difficult to find. An electronic publication, including an on-line or internet publication, is a “printed publication” if it is at least reasonably accessible to those interested in the field even if it is difficult to find.
- if the claimed invention was already described in another published U.S. patent application or issued U. S. patent that was based on a patent application filed before the patent holder’s filing date of date of invention.

If a patent claim is not new as explained above, you must find that claim invalid.

5.3 ANTICIPATION – MADE OR INVENTED BY SOMEONE ELSE

Samsung contends that all Asserted Claims are invalid as anticipated because the invention was first made or invented by someone else.

If someone other than the named inventor made or invented the invention described in one or more such patent claims involved in this lawsuit, then each such claim was “anticipated” by the other invention, and each such claim is invalid. Samsung must prove by a preponderance of the evidence that each such claim was anticipated by the other invention.

Here are two ways that Samsung can show that a patent claim was not new because the invention described in such claim was first made by someone else:

First, if the claimed invention was already made by someone else in the United States before the date of invention of the Asserted Claims if that other person had not abandoned the invention or kept it secret; and

Second, if Fractus and Samsung dispute who is a first inventor, the person who first conceived of the claimed invention and who first reduced it to practice is the first inventor; if one person conceived of the claimed invention first, but reduced it to practice second, that person is the first inventor only if that person (a) began to reduce the claimed invention to practice before the other party conceived of it and (b) continued to work with reasonable diligence to reduce it to practice from a time just before the other party's conception.

If the invention of a patent claim was first made or invented by someone else as explained above, you must find the patent claim invalid.

5.4 ANTICIPATION–STATUTORY BARS

Samsung may prove that the Asserted Claims are invalid by showing by a preponderance of evidence that each such claim failed to meet one of several statutory provisions in the patent laws. These provisions are called “statutory bars.” For a patent claim to be invalid because of a statutory bar, all of its requirements must have been present in one prior art reference dated more than one year before the effective date of the patent application.

Here is a list of ways Samsung can show that the Asserted Claims are invalid due to a statutory bar:

- if the Asserted Claims were already patented or described in a printed publication anywhere in the world one year before the effective filing date of the patent application. A reference is a “printed publication” if it is reasonably accessible to those interested in the field, even if it is difficult to find. An electronic

publication, including an on-line or internet publication, is a “printed publication” if it is at least reasonably accessible to those interested in the field, even if it is difficult to find.

- if the Asserted Claims were already being publicly or commercially used in the United States one year before the effective filing date of the patent application, and that use was not primarily an experimental use controlled by the inventor to test whether the invention worked for its intended purpose.
- if a device or method using the claimed invention was sold or offered for sale in the United States, and that claimed invention was ready for patenting, more than one year before application filing date. The claimed invention is not being sold or offered for sale if the patent holder shows that the sale or offer for sale was primarily experimental. The claimed invention is ready for patenting if it was actually built, or if the inventor had prepared drawings or other descriptions of the claimed invention that were sufficiently detailed to enable a person of ordinary skill in the field of the invention to make and use the invention based on them.
- if the patent holder had already obtained a patent on the claimed invention in a foreign country before filing the original U.S. application, and the foreign application was filed more than one year before the effective filing date of the U.S. application.

For a claim to be invalid because of a statutory bar, all of the claimed requirements must have been either (1) disclosed in a single prior art reference or (2) implicitly disclosed in a single prior art reference as viewed by one of ordinary skill in the field of the invention. The disclosure in a reference does not have to be in the same words as the claim, but all of the

requirements of the claim must be described in enough detail, or necessarily implied by or inherent in the reference, to enable someone of ordinary skill in the field of the invention looking at the reference to make and use at least one embodiment of the claimed invention.

A prior art reference also invalidates a patent claim when the claimed invention necessarily results from practice of the subject of the prior art reference, even if the result was unrecognized and unappreciated by one of ordinary skill in the field of the invention.

If you find a patent claim failed to meet a statutory bar, you must find the patent claim invalid.

5.5 OBVIOUSNESS

In this case, Samsung contends that all Asserted Claims are invalid as obvious.

A patent claim is invalid if the claimed invention would have been obvious to a person of ordinary skill in the field of the invention at the time the application was filed. This means that even if all the requirements of the claim cannot be found in a single prior art reference that would anticipate the claim or constitute a statutory bar to that claim, a person of ordinary skill in the field of the invention who knew about all of the prior art would have come up with the claimed invention.

But a patent claim composed of several requirements is not proved obvious merely by demonstrating that each of its requirements was independently known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of known requirements according to their established functions to produce a predictable result, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the requirements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is

already known. Accordingly, you may evaluate whether there was some teaching, suggestion, or motivation to arrive at the claimed invention before the time of the claimed invention, although proof of this is not a requirement to prove obviousness. Teachings, suggestions, and motivations may also be found within the knowledge of a person with ordinary skill in the art including inferences and creative steps that a person of ordinary skill in the art would employ. Additionally, teachings, suggestions, and motivations may be found in the nature of the problem solved by the claimed invention, or any need or problem known in the field of the invention at the time of and addressed by the invention.

Therefore, in evaluating whether such a claim would have been obvious, you should consider a variety of factors:

1. Whether Samsung has identified a reason that would have prompted a person of ordinary skill in the field of the invention to combine the requirements or concepts from the prior art in the same way as in the claimed invention. There is no single way to define the line between true inventiveness on one hand (which is patentable) and the application of common sense and ordinary skill to solve a problem on the other hand (which is not patentable). For example, market forces or other design incentives may be what produced a change, rather than true inventiveness.
2. Whether the claimed invention applies a known technique that had been used to improve a similar device or method in a similar way.
3. Whether the claimed invention would have been obvious to try, meaning that the claimed innovation was one of a relatively small number of possible approaches to the problem with a reasonable expectation of success by those skilled in the art.

But you must be careful not to determine obviousness using hindsight; many true inventions can seem obvious after the fact. You should put yourself in the position of a person of ordinary skill in the field of the invention at the time the claimed invention was made, and you should not consider what is known today or what is learned from the teaching of the patent.

The ultimate conclusion of whether a claim is obvious should be based on your determination

of several factual issues:

1. You must decide the level of ordinary skill in the field of the invention that someone would have had at the time the claimed invention was made.
2. You must decide the scope and content of the prior art. In determining the scope and content of the prior art, you must decide whether a reference is pertinent, or analogous, to the claimed invention. Pertinent, or analogous, prior art includes prior art in the same field of endeavor as the claimed invention, regardless of the problems addressed by the reference, and prior art from different fields reasonably pertinent to the particular problem with which the claimed invention is concerned. Remember that prior art is not limited to patents and published materials, but includes the general knowledge that would have been available to one of ordinary skill in the field of the invention.
3. You should consider any difference or differences between the prior art and the claim requirements.

Finally, you should consider any of the following factors that you find have been shown by the evidence:

A. Factors tending to show non-obviousness:

1. commercial success of a product due to the merits of the claimed invention;
2. a long-felt, but unsolved, need for the solution provided by the claimed invention;
3. unsuccessful attempts by others to find the solution provided by the claimed invention;
4. copying of the claimed invention by others;
5. unexpected and superior results from the claimed invention;
6. acceptance by others of the claimed invention as shown by praise from others in the field of the invention or from the licensing of the claimed invention;
7. disclosures in the prior art that criticize, discredit, or otherwise discourage the claimed invention and would therefore tend to show that the invention was not obvious.

You may consider the presence of any of the list factors A.1-7 as an indication that the

claimed invention would not have been obvious at the time the claimed invention was made.

B. Factors tending to show obviousness

1. independent invention of the claimed invention by others before or at about the same time as the named inventor thought of it.

You may consider the presence of the factor B.1 as an indication that the claimed invention would have been obvious at such time. Although you should consider any evidence of this factor, the relevance and importance of it to your decision on whether the claimed invention would have been obvious is up to you.

Samsung must prove by a preponderance of the evidence that a claimed invention was obvious. If you find that a claimed invention was obvious as explained above, you must find that claim invalid.

5.6 LEVEL OF ORDINARY SKILL

Several times in my instructions I have referred to a person of ordinary skill in the field of the invention. It is up to you to decide the level of ordinary skill in the field of the invention. You should consider all of the evidence introduced at trial in making this decision, including:

1. the levels of education and experience of persons working in the field;
2. the types of problems encountered in the field; and
3. the sophistication of the technology.

Fractus contends that the level of ordinary skill in the field of the invention would be an individual who, as of the relevant point in time, had an accredited master's degree in electrical engineering with an emphasis on electromagnetics, some knowledge of fractal antennas, and at least 5 years of experience with antenna design and multi-scale objects; or alternatively, had a doctorate in electrical engineering with an emphasis in electromagnetics, some knowledge of fractal antennas, and at least 2 years of experience with antenna design and multi-scale objects.

Samsung contends that the level of ordinary skill in the field was, as of the late 1990s or early 2000s, (a) someone who (i) held an accredited master's degree in electrical engineering that included significant coverage of antenna technologies and (ii) had two years of practical experience with antenna design; or alternatively (b) someone who (i) held a bachelor's degree in electrical engineering and (ii) had at least four years of practical experience in antenna design.

Because it is your determination to make, you need not adopt either Fractus's or Samsung's contention of the level of ordinary skill in the art.

5.7 CORROBORATION OF ORAL TESTIMONY

Oral testimony alone is insufficient to prove prior invention or that something is prior art or that a particular event or reference occurred before the filing date of the patents-in-suit. A party seeking to prove prior invention or prior art also must provide evidence that corroborates any oral testimony, especially where the oral testimony comes from an interested witness, or a witness testifying on behalf of an interested party. This includes any individual or company testifying that his or its invention predates the patents-in-suit, and also includes a patent owner seeking to prove an earlier date of invention than the effective filing date stated on the face of the patent.

Documentary or physical evidence that is made contemporaneously with the inventive process provides the most reliable proof that the testimony has been corroborated, but corroborating evidence may also consist of testimony of a witness, other than an inventor, to the actual reduction to practice or it may consist of evidence of surrounding facts and circumstances independent of information received from the inventor. If you find that the party has not corroborated the oral testimony with other evidence, you are not permitted to find that the subject of that oral testimony qualifies as prior art or supports a prior date of invention.

5.7 WRITTEN DESCRIPTION

Samsung contends that all of the asserted patent claims are invalid for failure of the patents to provide an adequate written description of the claimed invention. Samsung must prove that it is highly probable that these claims lacked an adequate written description.

To satisfy the written description requirement, the applicant must convey with reasonable clarity to those skilled in the art, as of the filing date sought, that he or she was in possession of the invention, and demonstrate that by disclosure within the original patent application itself. In order to satisfy the written description requirement with respect to a range, the original patent application must direct the person of ordinary skill in the art to that particular range.

Assessing such possession as shown in the disclosure requires an objective inquiry into the four corners of the specification. Ultimately, the specification must describe an invention understandable to a person of ordinary skill in the art and show that the inventor actually invented the invention claimed. A mere wish or plan for obtaining the claimed invention is not adequate written description. A description that renders obvious a claimed invention is not sufficient to satisfy the written description requirement of that invention. When claim language is broad, a patentee cannot always satisfy the written description requirement merely by clearly describing one embodiment of the thing claimed. A single embodiment supports a generic claim only if the specification reasonably conveyed to a person of ordinary skill in the art that the inventor had possession of the claimed subject matter at the time of filing of the original disclosure, and enabled one of ordinary skill to practice the full scope of the claimed invention.

If you find that one or more of the claims challenged by Samsung lacked an adequate written description, you must find each such claim invalid.

5.8 ENABLEMENT

Samsung contends that all of the asserted patent claims are invalid because the patent does not disclose sufficient information to enable one skilled in the field of the invention, at the time the application was filed (or its effective filing date), to make and use the full scope of the claimed invention. This requirement is known as the enablement requirement. If a patent claim is not enabled, it is invalid. Each claim must be analyzed for compliance with the enablement requirement. Samsung must prove that it is highly probable that the claim was not enabled.

In considering whether a patent claim satisfies the enablement requirement, you must keep in mind that patents are written for persons of skill in the field of the invention. Thus, a patent need not expressly state information that skilled persons would be likely to know or could obtain. Samsung bears the burden of establishing lack of enablement by showing that it is highly probable that a person skilled in the art, upon reading the patent document, would not be able to make the invention work without undue experimentation. of ordinary skill in the art that the inventor had possession of the claimed subject matter at the time of filing of the original disclosure, and enabled one of ordinary skill to practice the full scope of the claimed invention.

The fact that some experimentation may be required for a skilled person to make or use the claimed invention does not mean that a patent's written description fails to meet the enablement requirement. Factors you may consider in determining whether making the invention would require undue experimentation include:

1. the quantity of experimentation necessary;
2. the amount of direction or guidance disclosed in the patent;
3. the presence or absence of working examples in the patent;
4. the nature of the invention;
5. the state of the prior art;
6. the relative skill of those in the art;
7. the predictability of the art; and
8. the breadth of the claims.

Although you may consider the knowledge of one skilled in the art in determining whether a patent is enabling, it is the patent's specification, not the knowledge of one skilled in the art, that must supply the novel aspects of an invention in order to constitute adequate enablement. If the patent specification does not provide a sufficient enabling disclosure of the novel aspects of the invention, the knowledge of one skilled in the art is insufficient to supply the missing information.

If you find that one or more of these claims did not comply with the enablement requirement, you must find each such claim invalid.

6. DAMAGES

I will now instruct you on damages. If you find that Samsung has infringed one or more valid Asserted Claims, you must determine the amount of money damages to which Fractus is entitled.

By instructing you on damages, I do not suggest that one or the other party should prevail. These instructions are provided to guide you on the calculation of damages in the event you find infringement of a valid patent claim and thus must address the damages issue.

The amount of damages must be adequate to compensate Fractus for the infringement, but it may not be less than a "reasonable royalty." At the same time, your damages determination must not include additional sums to punish Samsung or set an example. You may award compensatory damages only for the loss that Fractus proves was caused by Samsung's infringement by a preponderance of the evidence.

6.1 DAMAGES — BURDEN OF PROOF

Fractus has the burden to prove its damages by a preponderance of the evidence. Fractus

must prove the amount of damages with reasonable certainty, but need not prove the amount of damages with mathematical precision. However, Fractus is not entitled to damages that are remote or speculative.

6.2 DAMAGES — WHEN DAMAGES BEGINThe amount of damages Fractus can recover is limited to those acts of infringement by Samsung that occurred after Fractus gave Samsung notice that they allegedly infringed the patents in issue. Notice of infringement can be actual or constructive, and I will explain in a moment what that means.

Actual notice means that Fractus communicated to Samsung a specific charge of infringement of the patents in issue by an accused product. This notice is effective as of the date given. You are instructed that the date Samsung received actual notice of their alleged infringement was May 5, 2009, the date Fractus filed suit in this Court.

Constructive notice means that Fractus complied with the marking requirement of the patent law. “Marking” means that substantially all of the products made, offered for sale, or sold under the patents in issue are marked to display the word ‘patent’ or the abbreviation ‘pat.’, together with the number of the patent. Packaging may be marked instead of the product itself only if it is not feasible or practical to mark the product. Fractus has the burden of establishing substantial compliance with the marking requirement. To do so, Fractus must show it is more probable than not that substantially all of the products it made, offered for sale, or sold under the patents in issue were marked, and that Fractus made reasonable efforts to ensure that its licensee who made, offered for sale, or sold products under the patents in issue marked substantially all of their products.

Your job is to calculate damages from the date Samsung received either actual or constructive notice, whichever was first. You should not award damages for any infringement by

Samsung occurring before they first received notice of the patents in issue.

6.3 REASONABLE ROYALTY

A royalty is a payment made to a patent holder in exchange for rights to make, use or sell the claimed invention. A reasonable royalty is the payment that would have resulted from a negotiation between a patent holder and the infringer taking place just before the time when the infringement first began. In considering the nature of this negotiation, the focus is on what the expectations of the patent holder and infringer would have been had they entered into an agreement at that time and acted reasonably in their negotiations. However, you must assume that both parties believed the patent valid and infringed. In addition, you must assume that the patent holder and infringer were willing to enter into an agreement; your role is to determine what that agreement would have been. The test for damages is what royalty would have resulted from the hypothetical negotiation and not simply what either party would have preferred.

In determining the royalty that would have resulted from the hypothetical negotiation you may consider real world facts including the following to the extent they are helpful to you:

- Licenses or offers to license the patent at issue in this case;
- Licenses involving comparable patents;
- The licensing history of the parties;
- Licensing practices in the relevant industry;
- Where the patent owner had an established policy of refusing to license the patent at issue.
- The relationship between the patent owner and alleged infringer, including whether or not they were competitors;
- The significance of the patented technology in promoting sales of the

alleged infringer's products and earning it profit;

- Alternatives to the patented technology and advantages provided by the patented technology relative to the alternatives;
- The portion of the alleged infringer's profit that should be credited to the invention as distinguished from nonpatented features, improvements or contributions;
- Any other economic factor that a normally prudent businessperson would, under similar circumstances, take into consideration in negotiating the hypothetical license.

6.4 DAMAGES LIMITATION -- NON-INFRINGEMENT ALTERNATIVES

In determining a reasonable royalty, you may consider whether Samsung had commercially acceptable non-infringing alternatives that were available at the time of the hypothetical negotiation and whether that would have affected the reasonable royalty the parties would have agreed upon.

While Fractus has the overall burden of proof on damages, Samsung, not Fractus, has the burden to prove by a preponderance of the evidence that such an acceptable non-infringing alternative was available.

7. INSTRUCTIONS FOR DELIBERATIONS

You must perform your duties as jurors without bias or prejudice as to any party. The law does not permit you to be controlled by sympathy, prejudice, or public opinion. All parties expect that you will carefully and impartially consider all the evidence, follow the law as it is now being given to you, and reach a just verdict, regardless of the consequences.

It is your sworn duty as jurors to discuss the case with one another in an effort to reach agreement if you can do so. Each of you must decide the case for yourself, but only after full consideration of the evidence with the other members of the jury. While you are discussing the case, do not hesitate to re-examine your own opinion and change your mind if you become convinced that you are wrong. However, do not give up your honest beliefs solely because the others think differently, or merely to finish the case.

Remember that in a very real way you are the judges — judges of the facts. Your only interest is to seek the truth from the evidence in the case. You should consider and decide this case as a dispute between persons of equal standing in the community, of equal worth, and holding the same or similar stations in life. A corporation is entitled to the same fair trial as a private individual. All persons, including corporations, and other organizations stand equal before the law and are to be treated as equals.

When you retire to the jury room to deliberate on your verdict, you may take this charge with you as well as exhibits which the Court has admitted into evidence. Select your Foreperson and conduct your deliberations. If you recess during your deliberations, follow all of the instructions that the Court has given you regarding your conduct during the trial. After you have reached your unanimous verdict, your Foreperson is to fill in on the form your answers to the questions. Do not reveal your answers until such time as you are discharged, unless otherwise directed by me. You must never disclose to anyone, not even to me, your numerical division on any question.

Any notes that you have taken during this trial are only aids to memory. If your memory should differ from your notes, then you should rely on your memory and not on the notes. The notes are not evidence. A juror who has not taken notes should rely on his or her independent

recollection of the evidence and should not be unduly influenced by the notes of other jurors. Notes are not entitled to any greater weight than the recollection or impression of each juror about the testimony.

If you want to communicate with me at any time, please give a written message or question to the bailiff, who will bring it to me. I will then respond as promptly as possible either in writing or by having you brought into the courtroom so that I can address you orally. I will always first disclose to the attorneys your question and my response before I answer your question. After you have reached a verdict, you are not required to talk with anyone about the case unless the Court orders otherwise. You may now retire to the jury room to deliberate.